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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,128	06/23/2006	Philip Head	608-482	8109
23117 7590 02/11/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
TSAY, FRANK				
ART UNIT		PAPER NUMBER		
3676				
MAIL DATE		DELIVERY MODE		
02/11/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/584,128

Applicant(s)

HEAD ET AL.

Examiner

Frank S. Tsay

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Prosecution on the merits of this application is reopened on claims 11-20 considered unpatentable for the reasons indicated below:

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-14 and 16-18 are rejected under 35 U.S.C. 102(b) as anticipated by Simpson (US 2002/0079106) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Simpson in view of Schroder et al (US 6,171,351).

Regarding claim 11: Simpson discloses a method for connecting a first tubular element **200** and a second tubular element **202**. The method involves the following steps:

- Locating a portion of the first tubular element within a portion of the second tubular element (Figure 10A).
- Expanding the portion of the first tubular element to form a connection resulting from the interference between the external surface of the portion of the first tubular element and the internal surface of the portion of the second tubular element.
- The external surface of the portion of the first tubular element is coated with hard angular material **206** (see paragraph [0066]). While the specific means by which the hard angular material is applied to the first

tubular element is not disclosed, the process used to apply the material is immaterial to the method of connecting two tubulars, i.e. a product by process limitation. Therefore, the mere presence of the hard angular material is sufficient to meet the limitations of the claims as it was applied by some process. Further, with regards to claims 12-14 and 18, any additional process limitations to the method for applying the hard angular material are also immaterial to the method of connecting two tubulars and are considered to be covered by the presence of the material itself.

Should applicant disagree with the above statement regarding the application of the hard angular material using plasma spraying the following alternate rejection is given. This alternate rejection would also apply to claims 12-14 and 18.

Simpson however fails to explicitly teach the coating process being of plasma spray. However, such process however fails to render a patentable distinction over Simpson in that such plasma spraying using mask to form protuberances has been employed for the same purpose in a similar method for connecting two separate tubular elements in Schroder et al reference. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have used Schroder et al plasma spray method to apply the adherent coating on the first tubular element of Simpson since such would have provided a mechanical bond which is better and more secure than an adhesive bond.

Regarding claim 16, the hard material includes elements (carbide granules) that become embedded in the surfaces as the connection is expanded.

Regarding claim 17, the method further involves lowering the pipe string into the borehole and subsequently radially expanding the pipe string downhole.

4. Claims 15, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson in view of Metcalfe (US 7,225,523) or Simpson in view of Schroder et al and further in view of Metcalfe.

Simpson or Simpson and Schroder et al., discloses all of the limitations of the above claim(s) except for the connection between the two tubulars involving a male/male coupling and/or a female/female connection that is expandable.

Metcalfe discloses a tubular connection system that is usable in a wellbore and is expandable.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the connection of Simpson or Simpson in view of Schroder et al. to include a male/male coupling and/or a female/female coupling as taught in by Metcalfe in order to have used a coupling system that expanded in a compact manner and thus created a reliable expansion of the tubulars without forming any internal restrictions (1:45-50 and 2:30-35).

Response to Arguments

Applicant's arguments with respect to claims 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank S. Tsay whose telephone number is (571) 272-7038. The examiner can normally be reached on Monday thru Friday, 7:30am-5:00 pm, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on (571)272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frank S Tsay
Primary Examiner
Art Unit 3676

2/5/08
/Frank S Tsay/
Primary Examiner, Art Unit 3676